ERM NC, PC

8000 Corporate Center Drive
Suite 200
Charlotte, NC 28226
(704) 541-8345
(704) 541-8416 (fax)

May 7, 2010

Mr. Vance Jackson
North Carolina DENR
Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

Re: Responses to NCDWM Questions on
Potential Remedial Contingencies for Crutchfield Property
Seaboard Chemical Corp./Riverdale Drive Landfill Site
Jamestown, North Carolina

Dear Vance:

On behalf of the Seaboard Group II and the City of High Point, ERM NC, PC (ERM) is providing responses to questions by the Division of Waste Management (DWM) on potential remedial contingencies if land use restrictions (LURs) cannot be successfully negotiated for the Crutchfield property. The DWM's questions were provided in your email letter dated April 23, 2010.

The DWM's questions (italicized) and ERM's responses are presented below. A site map showing the Crutchfield property is provided in Figure 1.

What happens if the Crutchfield LURs cannot be successfully negotiated?

1. *How would this affect your plans for the remediation system?*

   The design of the groundwater recovery and treatment system is not dependent on the implementation of LURs at the Crutchfield property. As such, we do not foresee the need to modify the remediation system in the event that the Crutchfield property is not subject to LURs. The remediation system is designed to control migration of contaminated ground waters and leachate at the site to prevent offsite migration and unacceptable impacts to surface waters. We anticipate that the network of ground water extraction

wells will effectively contain the affected ground water. The remedial monitoring program will verify ground water quality conditions and plume containment. Thus if no LURs are recorded for the Crutchfield property, we do not believe that any modifications to the monitoring program would be needed.

2. *What contingencies have you considered?*

We do not believe that any development in the first 200-300 feet of property immediately north of the lake would be possible, because it is owned by the Piedmont Triad Regional Water Authority, and existing restrictions prohibit construction of any dwellings.

We have considered contingencies in the unlikely event that a new water supply well is installed in the future on the southern portion of the Crutchfield property. While possible, we believe that this scenario also is extremely unlikely because of the control that DENR may exert under existing regulations. In particular, 15A NCAC 2C.0107(a)(J) prohibits siting a water supply well within 500 feet of a sanitary landfill, and that eliminates a portion of the Crutchfield property. Also, 15A NCAC 2C.0107(b) prohibits installation of a well intended for domestic use in an aquifer known to be contaminated. We are aware that groundwater beneath at least a portion of the southern portion of the Crutchfield property is contaminated from a source other than the Site.

Nevertheless, if such a well were installed, an enhanced ground water monitoring program may be warranted to evaluate potential effects on ground water flow and plume containment that may be caused by the ground water withdrawal from the new well. If the enhanced monitoring results indicate that the pumping of the new water well is causing affected ground water to migrate toward the Crutchfield property, then the DENR would be notified and termination of pumping would be recommended.

3. *Would there be a new remedy or would you simply modify the existing plan and use the same equipment and processes?*

As discussed above, we anticipate that a modification to the ground water monitoring plan may be necessary. However, we do not plan to modify the planned ground water recovery and treatment systems. The installation and pumping of additional ground water

recovery wells on the north side of Randleman Lake along the Crutchfield property line was not included in the remedial design and would not be recommended, because:

a) based on aquifer pumping tests and ground water modeling, ground water extraction on the south side of the lake is sufficient to achieve containment of the main plume (i.e pumping on the north side is not needed), and
b) ground water extraction on both the north and south sides of the lake has the potential to create excessive drawdown at the lake basin, which may induce surface water infiltration and recovery and thereby reduce the efficiency of the ground water recovery well system.

4. *When would this decision be made in light of capital purchases and resource allocation?*

The potential modifications to the ground water monitoring plan would involve activities that are readily implementable in the short term (i.e. sampling additional existing monitor wells) and have relatively low cost impact. No long lead time on the decision would be needed.

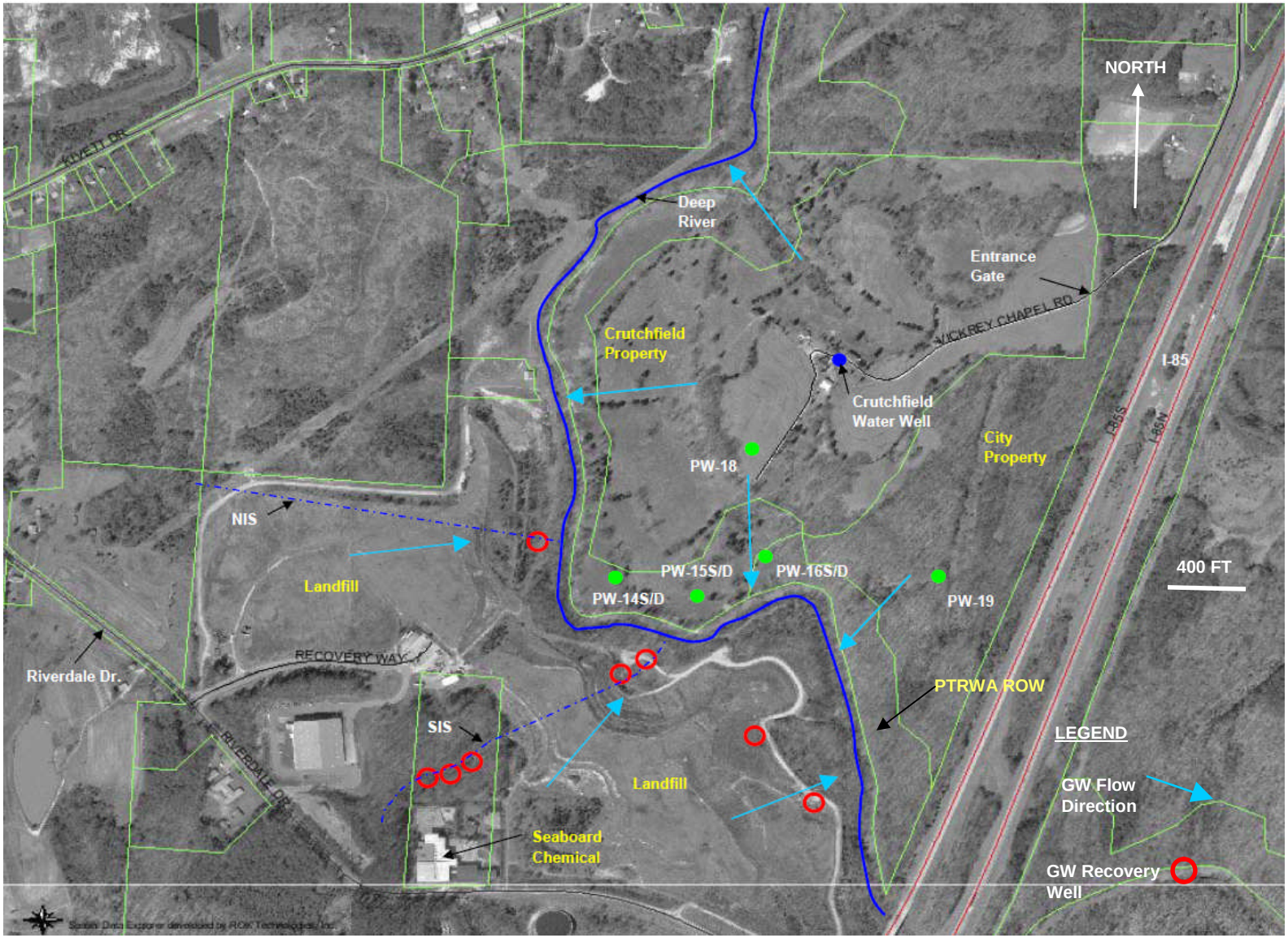
Please contact me or Jim LaRue if there are any questions or comments.

Sincerely,

Thomas M Wilson

Thomas M. Wilson, P.G.

Cc: Jim LaRue
Chris Thompson
Amos Dawson
Steve Earp
Gary Babb
Randy Smith



Source: Guilford County GIS

ERM NC, PC	SCHEMATIC SITE PLAN SEABOARD CHEMICAL/ RIVERDALE DRIVE LANDFILL SITE JAMESTOWN, NORTH CAROLINA	FIGURE 1